

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant: CHAPLIN, et al.  
Title: Compositions and Methods with Enhanced Therapeutic Activity  
Appl. No.: 10/790,662  
Filing Date: 1 March 2004  
Examiner: Timothy E. BETTON  
Art Unit: 1614  
Confirmation No: 9569

**DECLARATION UNDER 37 C.F.R. §1.131**

I, Kevin G. Pinney, hereby declare that:

1. I hold an appointment as Professor of Chemistry at Baylor University and have held this position since 2005. Prior to my appointment as Professor of Chemistry, I held the position of Associate Professor of Chemistry from 2000-2005 and Assistant Professor of Chemistry from 1993-2000 at the same institution. In addition, I have been a member, since 1999, of the Center for Drug Discovery at Baylor University. Since 1993, I have been a member of the Institute of Biomedical Studies at Baylor University.
2. I hold a Ph.D. in Organic Chemistry from the University of Illinois, Champaign-Urbana. I have authored or co-authored over 30 scientific papers, 16 patents and numerous patent applications in the fields of synthetic and medicinal chemistry over the last 25 years. A copy of my curriculum vitae is attached as Exhibit A.
3. I have reviewed the subject application and the rejection of claims 1-4, 10-16, 34-42 and 57 under 35 U.S.C. § 102(e) as being anticipated by compounds ZSB-36A and ZSB-37A at columns 27 and 28 of U.S. Patent 6,919,324. I am a co-inventor of the subject application and of U.S. Patent No. 6,919,324.



4. Compound ZSB-36A was conceived of and synthesized prior to the 24 October 2002 filing date of U.S. Patent No. 6,919,324. Compound ZSB-36A was synthesized by Phyllis Arthasery, a graduate student working in my laboratory at my direction. Pages 107-108 of Phyllis Arthasery's laboratory notebook (attached hereto as Exhibit B) demonstrate the successful synthesis of ZSB-36A prior to 24 October 2002. Additionally, the phosphate prodrug form of ZSB-36A, referred to as ZSB-36B, also was completed prior to 24 October 2002. See pages 109-112 and pages 122 to 131 of Phyllis Arthasery's laboratory notebook (Exhibit B).

5. Each of ZSB-36A, ZSB-36B, ZSB-37A and ZSB-37B were developed during a collaboration between OXiGENE, Inc., my laboratory and the laboratory of Robert Kane at Baylor University. During an extended period of this collaboration, including, to the best of my recollection, the summer and fall of 2002, a regularly scheduled bi-weekly telephone conference was held between Baylor University and OXiGENE personnel. I regularly attended these telephone conferences. During each telephone conference, I believe that Joseph Prezioso regularly recorded minutes of the matters discussed. I understand that copies of these minutes were typed up and distributed to the conference participants prior to the next regularly scheduled call to allow for corrections of any errors. I have maintained copies of these minutes in my files since I received them.

6. The minutes of our collaboration teleconferences demonstrate that ZSB-37A and ZSB-37B were conceived of and synthesized prior to 24 October 2002. Page one of the Meeting Minutes dated 17 September 2002 (excerpted and attached hereto as Exhibit C), indicate that ZSB-37B was undergoing deprotection and would be shipped to Klaus [Edvardsen] the week of 16 September 2002. A starting material in the synthesis of ZSB-37B is ZSB-37A. Therefore, it is reasonable and logical to conclude that ZSB-37A must have been completed prior to beginning the synthesis of ZSB-37B.

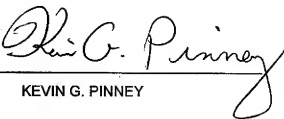
7. Page one of the minutes of our collaboration teleconference, dated 1 October 2002 (excerpted and attached hereto as Exhibit D), provide further evidence of the successful synthesis of ZSB-36A and ZSB-37A prior to 24 October 2002. Page one of the Minutes dated 1

October 2002 indicate that the phosphate prodrugs of ZSB-36A and ZSB-37A were shipped from Baylor University to our collaborators for testing on 3 September 2002 and the week of 23 September 2002, respectively.

8. Therefore, to the best of my knowledge, each of ZSB-36A, ZSB-36B, ZSB-37A and ZSB-37B were conceived of and successfully synthesized prior to the 24 October 2002 filing date of U.S. Patent No. 6,919,324.

9. I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true, and further that these statements were made with the knowledge that false statements and the like are punishable by fine or imprisonment, or both under Section 1001 of Title 18 of the United States Code and that such willful false statement may jeopardize the validity of the application or any patent issued thereon.

Executed at Waco, Texas, this 4th day of February 2010.



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KEVIN G. PINNEY